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Building Science

Towering Inferno

www.buildingscience.com
Grenfell Tower
North Kensington, United Kingdom
June, 2017
Fire propagates vertically and horizontally outside of cladding, and between the cladding and the cavity insulation.

Cladding ignites.
Insulation in cavity ignites.

Fire blows out window.
Fire punches inward through window to inside.

Fire propagates vertically and horizontally outside of cladding, and between the cladding and the cavity insulation.

Cladding ignites. Insulation in cavity ignites.

Fire blows out window.
Dubai Address Hotel
Dubai, United Arab Emirates
January, 2015
Mermoz Roubaix, France
May 2012
Tamweel Tower
Dubai, United Arab Emirates
November, 2012
Al Nahda Tower
Sharjah, United Arab Emirates
April, 2012
Polat Tower
Istanbul, Turkey
July, 2012
Dubai Torch Tower
Dubai, United Arab Emirates
August, 2017
Thorn House Hotel
Rostov-on-Don, Grozny, Chechnya
September, 2017
Marco Polo Apartments
Honolulu, Hawaii
July, 2017
Cladding Attachment
Hooker Chemical Building
Niagara Falls, New York
John E. Jaqua Academic Center
University of Oregon,
Eugene, Oregon
Stattdor Building
Dusseldorf, Germany
Where I Grew Up
Cladding Attachment
Second layer of z-bars should be installed perpendicular to the first layer; orientation of the two layers will depend on the requirements of the cladding attachment system.

First layer of z-bars embedded in the insulation layer; should the first layer be installed horizontally, the exterior leg should be turned down to promote drainage to the exterior.